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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/774,446	02/10/2004	Toshio Yamagiwa	0505-1267P	1682
2292	7590	08/08/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			JULES, FRANTZ F	
			ART UNIT	PAPER NUMBER

3617

DATE MAILED: 08/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/774,446

Applicant(s)

YAMAGIWA ET AL.

Examiner

Frantz F. Jules

Art Unit

3617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 7-10 and 17-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 11-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 07/09/2004.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of claims 1-6 and 11-16 in the reply filed on 07/15/2005 is acknowledged. The traversal is on the ground(s) that the election of species requirement is improper in view of the fact that a reasonable number of species . This is not found persuasive because the species outlined in the restriction requirement are drawn to patentably different embodiments.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 7-10 and 17-20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected specie, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 07/15/2005.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-5 and 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bunya et al (US 6,752,711 B2) in view of Sanchez et al (US 2004/0263324 A1). Bunya et al discloses A mounting structure of a tire pressure sensing system in a tire pressure sensing system (41) in which a pressure sensor is placed on a wheel to sense pressure of a tire which is mounted on the wheel, wherein the wheel is a cast wheel for

Art Unit: 3617

a vehicle including a rim portion where the tire is mounted, a hub portion provided at a center of the rim portion for mounting of the wheel to the vehicle, a disc portion connecting the rim to the hub and the air pressure sensor is placed in a boundary portion comprising collar between the rim portion and the spoke portions.

A recessed portion having a shape recessed toward the hub portion is provided, and the pressure sensor is placed in the recessed portion in accordance with claim 2.

The pressure sensor (41) being placed on an opposite side of an air valve which fills air in the tire in accordance with claims 3-4 as shown in figs. 2-3.

The pressure sensor (41) being placed on a side which is 180 degrees from the location of the air valve which fills air in the tire as they are mounted back to backing relation to the rim of the wheel in accordance with claim 5 as shown in figs. 2-3.

Bunya et al discloses all of the features as discloses above but does not a wheel comprising spoke portions connecting the rim portion and the hub portion. The general concept of providing spoke portions to a wheel is well known in the art as illustrated by Sanchez et al which disclose the teaching of a wheel comprising spoke portions. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Bunya et al to include the use of spoke portions connecting the rim portion and the hub portion in his advantageous wheel in order to reduce the weight of the wheel while providing for air ventilation to the wheel axle thereby reducing overheating of the bearing axle.

Art Unit: 3617

5. Claims 6 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bunya et al (US 6,752,711 B2) and Sanchez et al (US 2004/0263324 A1), as applied to claims 1 and 11, and in view of Delaport et al (6,672,150).

Bunya et al and Sanchez et al disclose all of the features of claims 6 and 16 except for a tire pressure sensing system that is mounted on collar with fastening means. The general concept of providing a tire pressure sensing system that is mounted on collar with fastening means is well known in the art as illustrated by Delaport which discloses the teaching of a tire pressure sensing system that is mounted on collar with fastening means (31, 32). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Bunya et al to include the use of a tire pressure sensing system that is mounted on collar with fastening means in his advantageous wheel in order to accommodate various size diameter wheel while reducing vibration in the wheel.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Schiavone, Sheikh-Bahaie, Toyofuku are cited to show related mounting structure of sensing device on wheel with spoke.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frantz F. Jules whose telephone number is (703) 272-6681. The examiner can normally be reached on Monday-Thursday and every other Friday.

Art Unit: 3617

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph S. Morano can be reached on (703) 272-6684. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Frantz F. Jules  
Primary Examiner  
Art Unit 3617

FFJ

August 3, 2005

FRANTZ F. JULES  
PRIMARY EXAMINER

A handwritten signature in black ink, appearing to be 'Frantz F. Jules', written over the printed name and title.